IN THE CLAIMS

Please cancel claims 1-31. Please add the following new claims:

- 32) (new) A process for the preparation of trans-3-Ethyl-2,5-dihydro-4-methyl-N-[2-[4-
- 5 [[[[(4-methylcyclohexyl)amino]carbonyl]amino]sulfonyl]phenyl]ethyl]- 2-oxo-1*H*-pyrrole-1-carboxamide, a compound of the formula 1,

Formula 1 comprising,

a) reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,

$$X \longrightarrow Z - R$$

Formula 2

to obtain a compound of formula 3,

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Formula 3

b) reacting a compound of formula 3 with 4-(2-Aminoethyl)benzene sulfonamide to obtain

4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzene sulfonamide, a

compound of formula 4,

Formula 4

- c) and further reacting the compound of formula 4 with *trans*-4-methylcyclohexyl isocyanate to obtain the compound of formula 1,
 - wherein,

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X is halogen, nitroaryl or haloaryl,

Z is O, S or NY, wherein Y is C₁-C₅-alkyl, C₁-C₅-haloalkyl, aryl or aralkyl, and

R is aryl or heteroaryl, where aryl or hetroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO-R¹, SR², SO-R³ and SO₂-R⁴,

 $\frac{R^{1} \text{ is H, C}_{1}\text{-}C_{5}\text{-alkyl, C}_{2}\text{-}C_{5}\text{-alkenyl, C}_{2}\text{-}C_{5}\text{-alkynyl, C}_{1}\text{-}C_{5}\text{-alkoxy or }C_{2}\text{-}C_{5}\text{-alkenoxy,}}{R^{2} \text{ is }C_{1}\text{-}C_{5}\text{-alkyl, C}_{2}\text{-}C_{5}\text{-alkenyl, C}_{2}\text{-}C_{5}\text{-alkynyl, C}_{1}\text{-}C_{5}\text{-haloalkyl or }C_{2}\text{-}C_{5}\text{-haloalkenyl,}}{R^{3} \text{ is }C_{1}\text{-}C_{5}\text{-alkyl, C}_{2}\text{-}C_{5}\text{-alkenyl, C}_{2}\text{-}C_{5}\text{-alkynyl, C}_{1}\text{-}C_{5}\text{-haloalkyl or }C_{2}\text{-}C_{5}\text{-haloalkenyl,}}{R^{4} \text{ is }C_{1}\text{-}C_{5}\text{-alkyl, C}_{2}\text{-}C_{5}\text{-alkenyl, C}_{2}\text{-}C_{5}\text{-alkynyl, C}_{1}\text{-}C_{5}\text{-haloalkyl or }C_{2}\text{-}C_{5}\text{-haloalkenyl, or }C_{2}\text{-}C_{5}\text{-alkenyl, C}_{2}\text{-}C_{5}\text{-alkynyl, C}_{1}\text{-}C_{5}\text{-haloalkyl or }C_{2}\text{-}C_{5}\text{-haloalkenyl, or }C_{2}\text{-}C_{5}\text{-}C_{5}\text{-haloalkenyl, or }C_{2}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_{5}\text{-}C_$

33) (new) A process for the preparation of a compound of formula 3,

Formula 3

comprising reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,

Formula 2

wherein,

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X is halogen, nitroaryl or haloaryl,

Z is O, S or NY, wherein Y is C₁-C₅-alkyl, C₁-C₅-haloalkyl, aryl or aralkyl, and

R is aryl or heteroaryl, where aryl or hetroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO-R¹, SR², SO-R³ and SO₂-R⁴,

R¹ is H, C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-alkoxy or C₂-C₅-alkenoxy,

R² is C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-haloalkyl or C₂-C₅-haloalkenyl,

R³ is C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-haloalkyl or C₂-C₅-haloalkenyl,

R⁴ is C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-haloalkyl or C₂-C₅-haloalkenyl, or

the moiety represented below by P, Q, S or T.

$$-\stackrel{\circ}{\underset{\circ}{\bigvee}} \qquad \stackrel{\circ}{\underset{\circ}{\bigvee}} \qquad \stackrel{\overset{\circ}{\underset{\circ}$$

10 34) (new) A process for the preparation of a compound of formula 4,

$$H_3C$$
 N
 N
 SO_2NH_2

Formula 4

comprising,

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a) reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2,

$$X \longrightarrow Z -R$$

Formula 2

to obtain a compound of formula 3,

$$H_3C$$
 O
 Z
 R

Formula 3

b) reacting a compound of formula 3 with 4-(2-Aminoethyl)benzene sulfonamide to obtain

4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzene sulfonamide, a

compound of formula 4,

wherein,

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X is halogen, nitroaryl or haloaryl,

Z is O, S or NY, wherein Y is C_1 - C_5 -alkyl, C_1 - C_5 -haloalkyl, aryl or aralkyl and R is aryl or heteroaryl, where aryl or hetroaryl radical is unsubstituted or substituted by one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl, CO- R^1 , SR^2 , SO- R^3 and SO_2 - R^4 ,

R¹ is H, C_1 - C_5 -alkyl, C_2 - C_5 -alkenyl, C_2 - C_5 -alkynyl, C_1 - C_5 -alkoxy or C_2 - C_5 -alkenoxy,

R² is C_1 - C_5 -alkyl, C_2 - C_5 -alkenyl, C_2 - C_5 -alkynyl, C_1 - C_5 -haloalkyl or C_2 - C_5 -haloalkenyl,

 R^3 is C_1 - C_5 -alkyl, C_2 - C_5 -alkenyl, C_2 - C_5 -alkynyl, C_1 - C_5 -haloalkyl or C_2 - C_5 -haloalkenyl, C_1 - C_5 -haloalkyl or C_2 - C_5 -haloalkenyl, or the moiety represented below by P, Q, S or T.

5 35) (new) A process for the preparation of a compound of formula 4,

Formula 4

comprising reacting a compound of formula 3

Formula 3

with 4-(2-Aminoethyl)benzene sulfonamide to obtain 4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzene sulfonamide, a compound of formula 4,

____ wherein,

R¹ is H, C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-alkoxy or C₂-C₅-alkenoxy,

R² is C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-haloalkyl or C₂-C₅-haloalkenyl,

R³ is C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-haloalkyl or C₂-C₅-haloalkenyl,

R⁴ is C₁-C₅-alkyl, C₂-C₅-alkenyl, C₂-C₅-alkynyl, C₁-C₅-haloalkyl or C₂-C₅-haloalkenyl, or

the moiety represented below by P, Q, S or T.

$$-\sum_{O}^{N} \qquad \bigcap_{N}^{N} \qquad \bigcap_{$$

- (new) The process as claimed in claim 35 wherein the compound of formula 4 is further reacted with *trans*-4-methylcyclohexyl isocyanate to obtain the compound of formula 1.
- 37) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3
 pyrrolidin-2-one with a compound of formula 2, is carried out in presence of an organic base and optionally an acid scavenger compound.
 - 38) (new) The process as claimed in claim 32 comprising,

a) reacting 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2, wherein Z is O and R is 4-nitrophenyl, to obtain a compound of formula 3a,

Formula 3a

- b) reacting the compound of formula 3a with 4-(2-Aminoethyl)benzene sulfonamide to

 obtain 4-[2-(3-Ethyl-4-methyl-2-carbonyl pyrrolidine amido)ethyl]benzene

 sulfonamide, a compound of formula 4,
 - c) and further reacting the compound of formula 4 with *trans*-4-methylcyclohexyl isocyanate to obtain the compound of formula 1.
- 39) (new) The process as claimed in claim 37 wherein the organic base is selected from the group consisting of 4-dimethylaminopyridine; 4-pyrrolidinopyridine; diisopropylethylamine, tetramethylguanidine; 1,8-diazabicyclo[5.4.0]undec-7-ene; 1,5-diazabicyclo [4.3.0] non-5-ene; 2,6-lutidine and picolines.
- 40) (new) The process as claimed in claim 37 wherein the acid scavenger compound is

 selected from the group consisting of trialkylamines, pyridine, sodium carbonate and potassium carbonate.
 - 41) (new) The process as claimed in claim 37 wherein the organic base is 4dimethylaminopyridine and the acid scavenger compound is triethylamine.

- 43) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2 is carried out in a chlorinated hydrocarbon solvent.
 - 44) (new) The process as claimed in claim 32 wherein the reaction of 3-Ethyl-4-methyl-3-pyrrolidin-2-one with a compound of formula 2 is carried out at a temperature between the range of about 0°C to about 35°C for about 8 to about 15 hours.
- 10 45) (new) The process as claimed in claim 38 wherein a compound of formula 3a is obtained in a purity of greater than 99%.
 - 46) (new) The process as claimed in claim 38 wherein a compound of formula 4 is obtained in a purity of greater than 99%.
- 47) (new) The process as claimed in claim 38 wherein a compound of formula 1 is obtained in a purity of greater than 99%.
 - 48) (new) The intermediate compound of formula 3,

$$R_3$$
C N Z R

Formula 3

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Z is O, S or NY, wherein Y is C₁-C₅-alkyl, C₁-C₅-haloalkyl, aryl or aralkyl, and

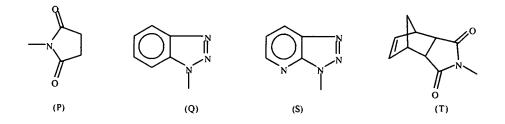
R is aryl or heteroaryl, where aryl or hetroaryl radical is unsubstituted or substituted by

one or more radicals from the group consisting of nitro, halogen, cyano, azido, haloalkyl,

CO-R¹, SR², SO-R³ and SO₂-R⁴,

 $\frac{R^1 \text{ is H, C}_1\text{--}C_5\text{-alkyl, C}_2\text{--}C_5\text{-alkenyl, C}_2\text{--}C_5\text{-alkynyl, C}_1\text{--}C_5\text{-alkoxy or C}_2\text{--}C_5\text{-alkenoxy,}}{R^2 \text{ is C}_1\text{--}C_5\text{-alkyl, C}_2\text{--}C_5\text{-alkenyl, C}_2\text{--}C_5\text{-alkynyl, C}_1\text{--}C_5\text{-haloalkyl or C}_2\text{--}C_5\text{-haloalkenyl,}}{R^3 \text{ is C}_1\text{--}C_5\text{-alkyl, C}_2\text{--}C_5\text{-alkenyl, C}_2\text{--}C_5\text{-alkynyl, C}_1\text{--}C_5\text{-haloalkyl or C}_2\text{--}C_5\text{-haloalkenyl,}}{R^4 \text{ is C}_1\text{--}C_5\text{-alkyl, C}_2\text{--}C_5\text{-alkenyl, C}_2\text{--}C_5\text{-alkynyl, C}_1\text{--}C_5\text{-haloalkyl or C}_2\text{--}C_5\text{-haloalkenyl, or C}_3\text{--}C_5\text{-haloalkenyl, or C}_3\text{--}C_5\text{-haloalkyl or C}_3\text{--}C_5\text{-haloalkenyl, or C}_3\text{--}C_5\text{-haloalkenyl, or C}_3\text{--}C_5\text{--haloalkyl or C}_3\text{--}C_5\text{--haloalkenyl, or C}_3\text{--}C_5\text{--haloalkenyl, or C}_3\text{--}C_5\text{--haloalkenyl, or C}_3\text{--}C_5\text{--haloalkenyl, or C}_3\text{--}C_5\text{--haloalkenyl, or C}_3\text{--haloalkenyl, or C}_3\text{$

the moiety represented below by P, Q, S or T.



- 49) (new) The intermediate compound of formula 3, as claimed in claim 48 wherein Z is O and R is aryl or the moiety represented by (P), (Q), (S) or (T), characterised in that aryl is phenyl substituted with one or more radicals selected from nitro, halo, cyano, 4-trifluoroalkyl, 2,4-bis(trifluoroalkyl) or 2,6-bis(trifluoroalkyl).
- 50) (new) The intermediate compound of formula 3, as claimed in claim 48, wherein Z is O and R is selected from phenyl substituted with 4-nitro, 2,4-dinitro, 2,6-dinitro, 4-halo.

2,4-dihalo, 2,6-dihalo, 4-trifluromethyl, 2,4-bis(trifluoromethyl) or 2,6-bis(trifluoromethyl).

51) (new) The intermediate compound of formula 3a:

Formula 3a

52) (new) The compound as claimed in claim 51 having a purity greater than 99%.

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